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AG101 Cuff Inflator Air Source
Manual

Serial No. 08251002

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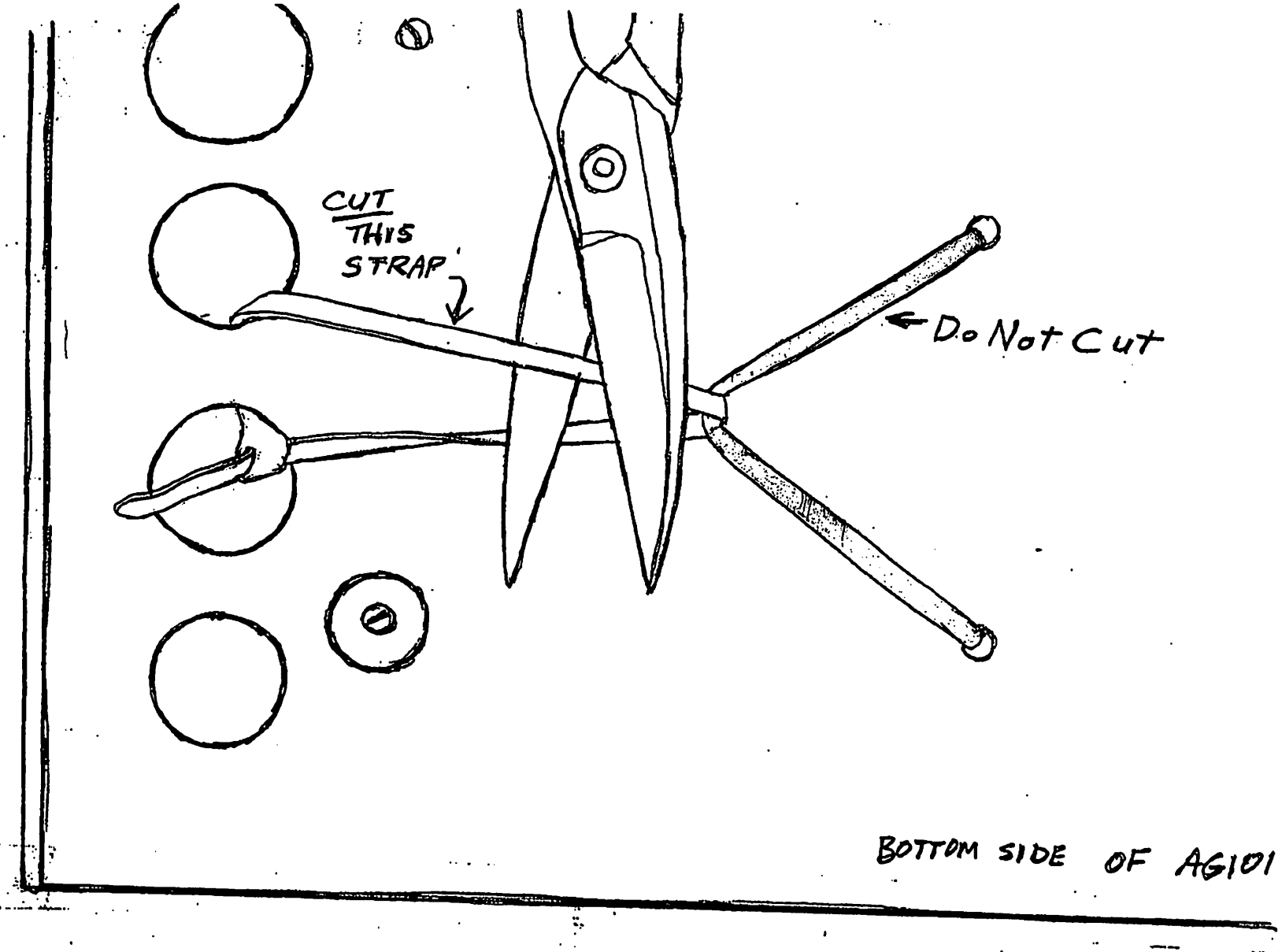

Before operating AG101, turn unit upside down and cut the white shipping tie-down strap. // Before shipping the unit, install a new strap and pull it tight to hold the compressor securely during transit.

Model AG101 Cuff Inflator Air Source

Operating Instructions

The **AG101 Air Source** contains an air compressor and an accumulator which stores enough air to inflate large thigh cuffs rapidly. A cooling fan is also contained in the unit to cool the compressor. Cooling air is drawn through holes in the bottom of the unit so it is important not to set the Air Source on anything which could restrict the passage of cooling air.

The air compressor in the unit will not start if the air tank is fully pressurized. This built-up pressure can be relieved by turning off the **AG101**, disconnecting all cuffs and switching the **E20** to **Cuff Mode**. This will allow the air to escape freely from the **AG101** and the pump will then be able to start easily. If the compressor is unable to start, the unit will vibrate more than usual and the sound of the cooling fan will be heard. If it is left in this state for some time the compressor will overheat. If this happens, a thermal protector in the air compressor will open and it will not be possible to run the unit until it has cooled off.

All the components in the **AG101** are rated for continuous duty; however, the unit will last longer if it is not run unnecessarily. The accumulator will build up full pressure in about a minute after starting or being completely exhausted. Once full, the **AG101** will supply enough air to inflate a large thigh cuff to 50 mmHg every 15 to 20 seconds indefinitely.

Unpacking

To prevent the compressor from moving during shipping it is tied down by a heavy cord which is tightened with a nylon cable tie. During use the compressor floats on spring mounts. It is necessary to cut the nylon cable tie and remove it prior to use. Please refer to the sketch at the front of the manual for more details.

Installation

The **AG101** is connected to the **E20 Rapid Cuff Inflator** by means of a polyethylene hose. The polyethylene hose plugs into the outlet on the back panel of the AG101, and into the inlet on the right side of the **E20 Rapid Cuff Inflator**. Push the hose in as far as possible to make a good connection. If it is necessary to remove the hose, push in firmly on both sides of the plastic ring on the fitting and simultaneously pull on the hose to remove it.

Maintenance No internal maintenance is required.

GUARANTEE All Hokanson electronic instruments carry a FIVE YEAR WARRANTY. Instruments are warranted against defects in parts, workmanship and performance for a period of five years from the date of delivery, provided that they have not been abused or repaired by an unauthorized person. Repair is free of charge when the instrument is returned prepaid. Return shipment will be made at our expense in a manner similar to your shipment to us.

70-5500
(1-30-77)

GAST MANUFACTURING CORPORATION
P.O. BOX 97, BENTON HARBOR, MICHIGAN 49022
PHONE 616-926-6171

OPERATING AND MAINTENANCE INSTRUCTIONS AND SERVICE KITS FOR MODELS

MOA
MAA

OIL-LESS DIAPHRAGM VACUUM PUMPS AND AIR COMPRESSORS

PRINTED IN U.S.A.

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OPERATING and MAINTENANCE INSTRUCTIONS

Do not at any time lubricate any of the parts with oil, grease, or petroleum products nor clean with acids, caustics or chlorinated solvents. Be very careful to keep the diaphragm from contacting any petroleum product or hydro carbons. It can affect the service life of the pump.

To clean or replace the filter and/or rubber gasket, remove the four (4) phillips screws in the top of the unit. The filter and gasket are located beneath this top plate. Remove the filter and wash it in a solvent and/or blow off with air and replace. The gasket may be cleaned with water. Replace the filter in proper position and replace the gasket.

To replace the diaphragm, remove the four socket cap screws from the head of the pump. The diaphragm is held in place by two phillips head screws. Remove screws, retainer plate, and the diaphragm. The diaphragm will fit in any position on the connecting rod. Replace the plate and the two phillips head screws. Torque to 12 inch-pounds.

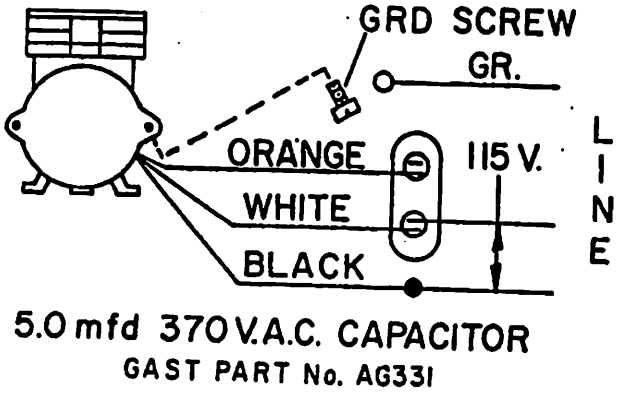
Caution: Do not raise any burrs or nicks on the heads of these screws. These burrs could cause damage to the inlet valve.

For replacing the inlet and outlet valve, remove the slotted machine screw and nut that hold the valves in place. The stainless steel inlet and outlet valves are interchangeable. Clean them with water. When replacing the outlet valve, place the new valve in location and note there is a retaining bar near the machine screw hole. This retaining bar holds the valve in position. When replacing the valves, note that the valve holders are marked with an X in one corner. This X should be located as shown in the illustration. Replace the head and tighten the socket head screws to 28-30 inch-pounds of torque.

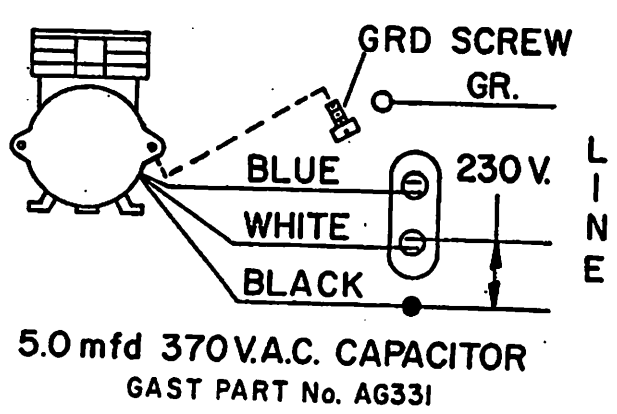
Do not attempt to replace the connecting rod or motor bearings. If, after cleaning the unit and/or installing a new Service Kit, the unit still does not operate properly, contact your representative, the factory, or return the pump to one of our authorized Service Centers.

DANGER: To prevent explosive hazard, Do NOT pump combustible liquids or vapors with these units.

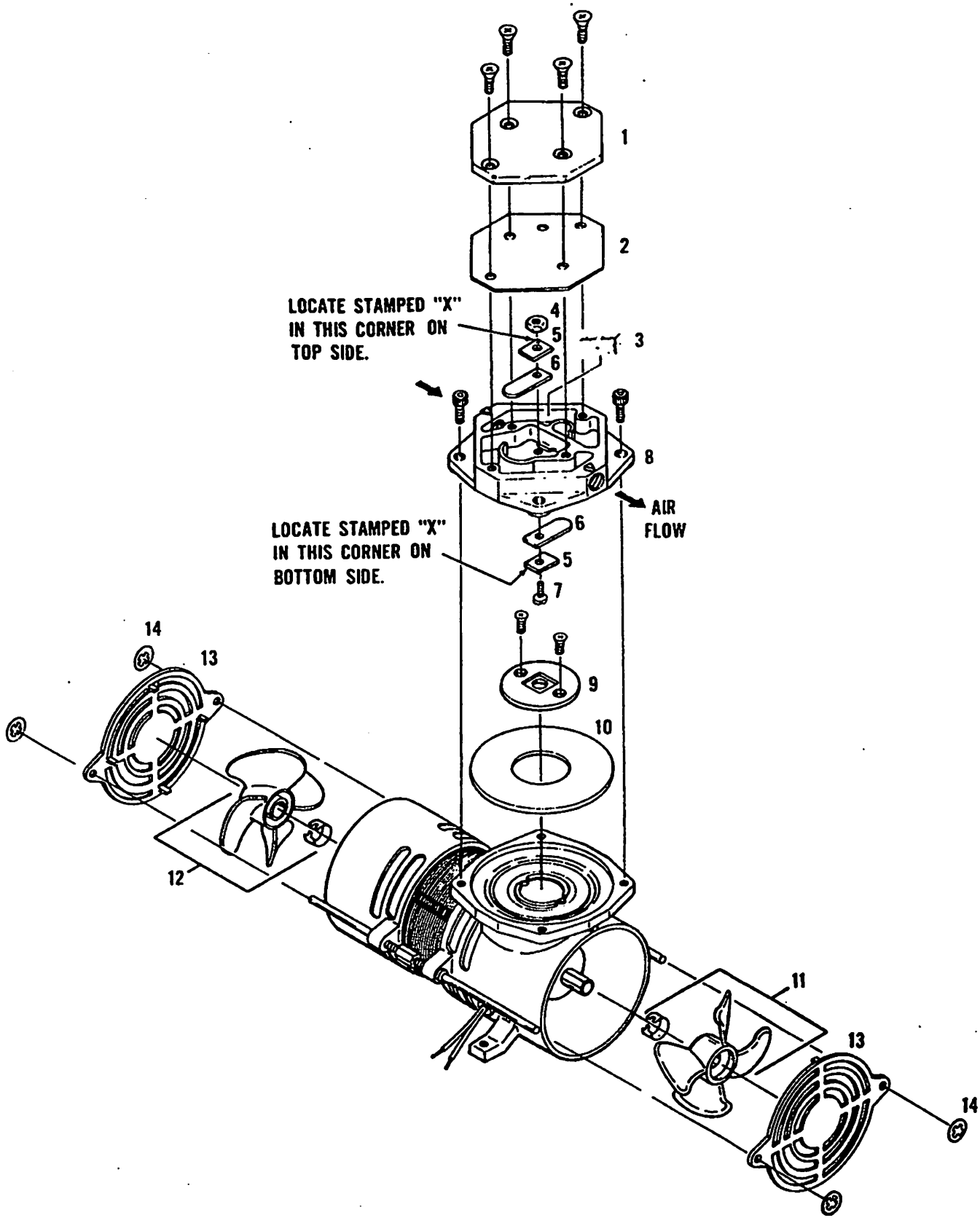
Wiring information for all capacitor start motors is as follows:



5.0 mfd 370 V.A.C. CAPACITOR
GAST PART No. AG331



5.0 mfd 370 V.A.C. CAPACITOR
GAST PART No. AG331


1
2
LOCATE STAMPED "X"
IN THIS CORNER ON
TOP SIDE.
4
5
6
3
8
AIR
FLOW
LOCATE STAMPED "X"
IN THIS CORNER ON
BOTTOM SIDE.
6
5
7
14
13
9
10
12
11
13
14

SERVICE KITS

IF YOU ARE UNABLE TO RETURN YOUR GAST UNIT TO AN AUTHORIZED SERVICE CENTER, YOU MAY WANT TO KEEP ONE OR TWO SERVICE KITS ON HAND. THESE SERVICE KITS CONTAIN ALL PARTS WHICH SHOULD BE REPLACED WHEN SERVICING YOUR GAST UNIT, SUCH AS FILTERS, INLET AND OUTLET VALVES, AND THE HEAD GASKET.

Use SERVICE KIT K309 for the MOA diaphragm units. Order (2) K309 SERVICE KITS for MAA units.

• Indicates parts included in SERVICE KIT.

REF. NO.	DESCRIPTION	PART NO.	MODEL MOA	MODEL MAA*
1	COVER, HEAD	AF780	1	2
• 2	HEAD GASKET	AF783	1	2
• 3	FILTER/MUFFLER ELEMENT	AF857A	1	2
• 4	NUT	BC101	1	2
• 5	RETAINER, VALVE	AF819	2	4
• 6	LEAF VALVE	AF795	2	4
• 7	SCREW	BB316	1	2
8	HEAD	AF779	1	2
9	RETAINER PLATE	AF778	1	2
10	DIAPHRAGM	AG288	1	2
11	FAN	AF785A	1	1
12	FAN	AF785B	1	1
13	GRILLE	AE105	2	2
14	PUSH ON	AE106	4	4

*Double ended pump - not illustrated — Basically two MOAs mounted back to back with heads rotated 90°; ports facing the side.

DO NOT AT ANY TIME ATTEMPT TO REMOVE THE CONNECTING ROD OR COMPLETELY DISASSEMBLE THE PUMP. IF IT DOES NOT GIVE YOU THE PROPER SERVICE EVEN AFTER INSTALLING A NEW SERVICE KIT, PLEASE RETURN IT TO ONE OF THE AUTHORIZED SERVICE CENTERS WHICH ARE LOCATED AT:

Brenner-Fiedler and Associates
16210 Gundry Avenue
Paramount, CA 90723
213/636-3206

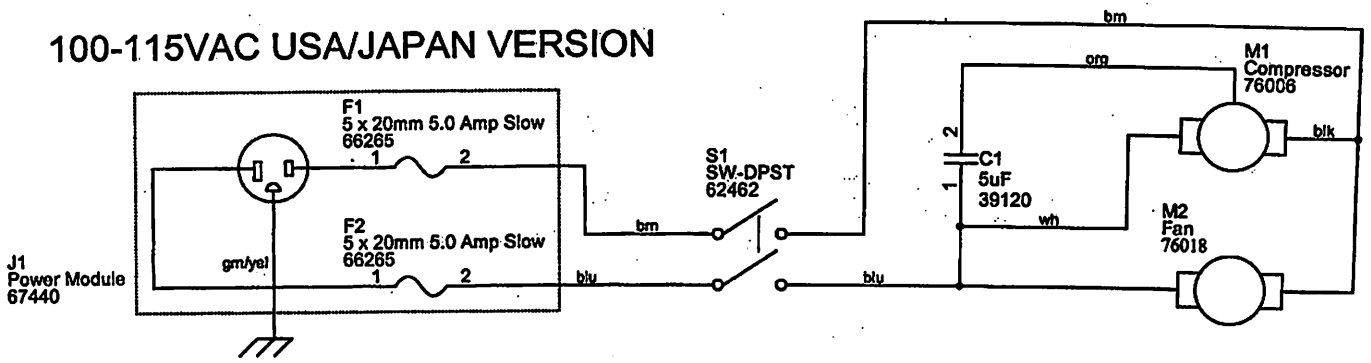
Gast Manufacturing Corporation
515 Washington Avenue
Carlstadt, NJ 07072
201/933-8484

Gast Manufacturing Corporation
2300 M-139
Benton Harbor, MI 49022
616/926-6171

Wainbee, Ltd.
121 City View Dr.
Toronto, Ontario
Canada
416/248-5621

Wainbee, Ltd.
215 Brunswick Blvd.
Pointe Claire, Montreal, Quebec
Canada
514/697-8810

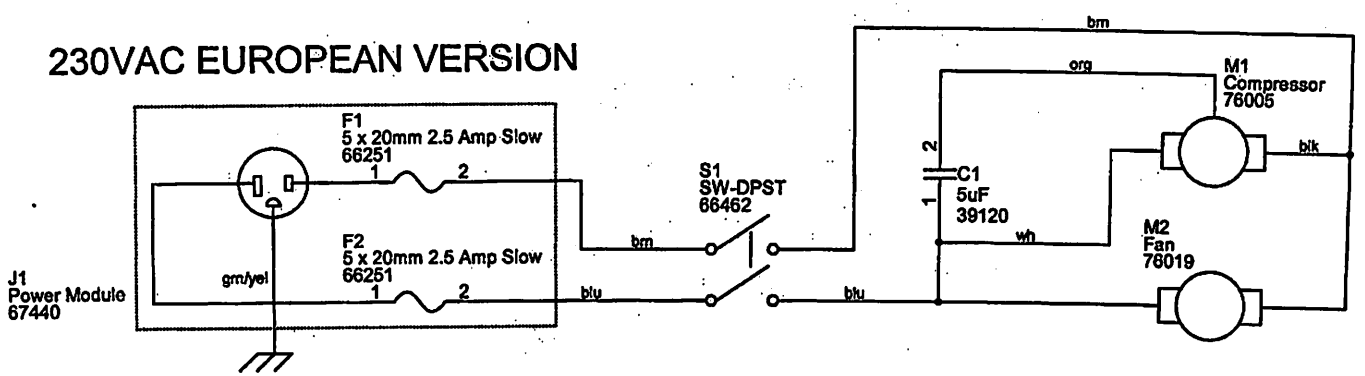
100-115VAC USA/JAPAN VERSION



S1 Cutler Hammer 2600R21E
M1 Gast MOA-P130-HB
M2 Toyo USTF120381152T
C1 Gast AG331

BOM #00585

230VAC EUROPEAN VERSION



S1 Cutler Hammer 2600R21E
M1 Gast MOA-P108-HD
M2 Toyo USTF120382302T
C1 Gast AG331

BOM #00582

D. E. Hokanson, Inc.		
Title: AG101 Schematic		
Size: Letter	Document Number: 86924.Schdoc	Rev: 1
Date: 11/07/2006	Sheet: 1 of 1	
File: I:\Data\DXP Projects\AG101\86924.Schdoc		Drawn by: MV

ELECTRICAL LEAKAGE AND HIPOT TEST

INSTRUMENT: AG-101

SERIAL NUMBER: 08251002

LEAKAGE TEST:

MODE	GROUND	POWER ON		POWER OFF		CURRENT LIMIT (uA)
		normal	reverse	normal	reverse	
EXPOSED CHASSIS METAL TO GROUND	OPEN	13.95	12.51	11.06	10.80	100 uA AC
	INTACT	0.00	0.02	0.01	0.01	10 uA AC
DOPPLER CONN. RING TO GROUND	OPEN	N/A		N/A		0.0 uA DC
	INTACT					100 uA DC

✓ PASSED HIPOT TEST: 60 SECONDS AT 1500 VAC

✓ PASSED GROUND IMPEDANCE TEST: < .1 Ω AT 25 AMPS FOR 10 SECONDS

EC Declaration of Conformity

Hokanson®
AG101 Air Source

Manufacturer	D. E. Hokanson, Inc. 12840 NE 21st Place Bellevue, WA 98005, USA Tel 425 882 1689 Fax 425 881 1636
Authorized Representative in EC EC REP	Hokanson UK Waldeck House, Waldeck Road Maidenhead, Berkshire SL6 8BR England Tel 44 01628 773233 Fax 44 01628 770562
Details of Electrical Equipment	Line powered, Class 1, Type B Equipment 230 VAC, 50 Hz, 35 Watts
Classification of Device (Annex IX)	I
Model Description	AG101 Air Source
Directives this equipment complies with	Council Directive 93/42/EEC Concerning Medical Devices.
Harmonized Standards applied in order to verify compliance with Medical Device Directives	IEC 60601-1 General Requirements for Basic Safety & Essential Performance IEC 60601-1-2 Electromagnetic compatibility IEC 60601-1-6 Usability
Technical Construction File maintained at:	D. E. Hokanson, Inc. 12840 NE 21st Place Bellevue, WA 98005, USA
Date of Issue	June 15, 2010
Notified Body:	DQS Medizininprodukte GmbH 0297 D-60433 Frankfurt am Main August-Schanz-Strasse-21 Germany

Kyra Gray, President

Bellevue, WA 98005, USA